

19980124.qrp v00_n980.qrs.980124

Date: Sat, 24 Jan 1998 19:03:14 EST
From: qrp-l@Lehigh.EDU
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: QRP-L digest 980

QRP-L Digest 980

Topics covered in this issue include:

- 1) [1787] Heath HW 7 revival and fixes
by "rohre" <rohre@arlut.utexas.edu>
- 2) [1788] RE: Elmers wanted...take charge yourself
by Sam <kc5tja@animeonline.ml.org>
- 3) [1789] Re: Power Meter bargain:Ten Tec's kit
by "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
- 4) [1790] Re: BUILD this receiver...
by Paul Harden <pharden@aoc.nrao.edu>
- 5) [1791] WTS: Norcal Paddle Arms
by Rick Tavan <tavan@tibco.com>
- 6) [1792] Re: Elmers wanted...take charge yourself
by Jim Lowman <jmlowman@ix.netcom.com>
- 7) [1793] Re: WTS: Norcal Paddle Arms
by "Phil, K6LS" <k6ls@prolynx.com>
- 8) [1794] Pixie Mods
by "V.C. Angell" <angell@northernnet.com>
- 9) [1795] book for NorCal 40
by Roger Braker <msebrakr@telepath.com>
- 10) [1796] Re: Reciprocal propagation
by Peter Larsen <larsenp@cadvision.com>
- 11) [1797] Re: Elmers wanted...take charge yourself
by bruce muscolino <w6toy@pop.erols.com>
- 12) [1798] Elmering
by bruce muscolino <w6toy@pop.erols.com>
- 13) [1799] Elmering -- Part 2
by bruce muscolino <w6toy@pop.erols.com>
- 14) [1800] Re: Elmering -- Part 2
by Brian Kassel <bkassel@dancris.com>
- 15) [1801] Reciprocal propagation
by "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
- 16) [1802] fs 2 meter and hf rx
by RangerSF5@aol.com
- 17) [1803] FS:
by Robert Parks <rob3ert@vegas.infi.net>
- 18) [1804] N/T FOX HI
by "KA5T Larry Wise" <lewise@inetport.com>
- 19) [1805] FS: items

- by Robert Parks <rob3ert@vegas.infi.net>
- 20) [1806] sst
by dave_epps@juno.com
- 21) [1807] Re: Elmers wanted...take charge yourself
by Sam <kc5tja@animeonline.ml.org>
- 22) [1808] Re: Elmer project
by launerb@crl.com (William H. Launer)
- 23) [1809] Re: Elmer project
by Sam <kc5tja@animeonline.ml.org>
- 24) [1810] Re: Reciprocal propagation; "more aluminum"
by SEAB&SHARON LYON <SSLYON@worldnet.att.net>
- 25) [1811] AA battery failure(long?)
by Jade Account <jadepro@jadeprod.com>
- 26) [1812] Re: Elmering -- Part 2
by N9DD <N9DD@aol.com>
- 27) [1813] Re: CW in a song
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>
- 28) [1814] Neat Multimeter for HB Newbies
by Joe Gervais <vole@primenet.com>
- 29) [1815] Help with NW 80/20 active filter
by "D.K. Philbin" <dphilbin@slonet.org>
- 30) [1816] TenTec 1254 WIP (Work in Progress)
by adams@chuck.dallas.sgi.com (Chuck Adams)
- 31) [1817] Tentec 1320, 20m cw qrp 4-sale, unbuilt
by W7LS <w7ls@blarg.net>
- 32) [1818] Re: Reciprocal propagation; "more aluminum"
by Monte Stark <ku7y@sage.dri.edu>
- 33) [1819] Sierra Questions - Mods?
by Dave Fifield <fifield@pacbell.net>
- 34) [1820] Reciprocal Propagation
by Adrian Weiss <aweiss@sunflowr.usd.edu>
- 35) [1821] AB0CD/9 superbowl weekend
by "Dick Schneider" <rschneid@ix15.ix.netcom.com>
- 36) [1822] testing
by RangerSF5 <RangerSF5@aol.com>
- 37) [1823] Re: testing
by Sam <kc5tja@animeonline.ml.org>
- 38) [1824] Those missing pages from Q.Q. (Jan 1998)
by Tony Fishpool <g4wif@btinternet.com>
- 39) [1825] Re: Frequency Counter
by Leon Heller <leon@lfheller.demon.co.uk>
- 40) [1826] FS: items ---SOLD
by Robert Parks <rob3ert@vegas.infi.net>
- 41) [1827] FOX: W2MBY N/T Fox 01/24/98
by W2MY & W2MBY <n2mnn@spacegate.com>
- 42) [1828] Re: Help with NW 80/20 active filter
by K5BDZ <K5BDZ@aol.com>
- 43) [1829] Re: Elmering -- Part 2

- by bruce muscolino <w6toy@pop.erols.com>
- 44) [1830] Re: BUILD this receiver...
by "Stuart B.D. Hunt" <stuart001@ameritech.net>
- 45) [1831] Re: Elmers wanted...take charge yourself
by Joe Gervais <vole@primenet.com>
- 46) [1832] Photos of paddles and tuner
by TonyDrumm@ibm.net (Tony Drumm)
- 47) [1833] Re: Twist on Elmer Project
by John Levreault <jlevro@shore.net>
- 48) [1834] Wanted:LDG AT-11
by "Kelly Ellison" <kelman@dialnet.net>
- 49) [1835] Just Do It ! (With Elmer)
by Tom Moll <tomm@xata.com>
- 50) [1836] NW 80/20 filter problem solved
by "D.K. Philbin" <dphilbin@slonet.org>
- 51) [1837] Re: EMTech
by "Dan Hogan" <dhhogan@lightside.com>
- 52) [1838] Toko IF cans..ID
by "D.K. Philbin" <dphilbin@slonet.org>
- 53) [1839] Re: Elmers wanted...take charge yourself
by Dave Sjolín <sjolin@swbell.net>
- 54) [1840] Elmer project/Norcal 40 book
by "Tracy, Michael, KC1SX" <mtracy@arrl.org>
- 55) [1841] EE20 Book Ordering
by "Dan Hogan" <dhhogan@lightside.com>
- 56) [1842] FS SST-30
by Bruce Huyck <bruce@pad-uky.campus.mci.net>
- 57) [1843] QST Index
by wa8rxi@juno.com (Richard C Arzadon)
- 58) [1844] NorCal 49'er PWB Layout?
by "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
- 59) [1845] Late Homebrew Sprint Summary
by "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>
- 60) [1846] beacon 1-24-98
by "Dean Marzocca" <n2tnn@ifu.net>
- 61) [1847] FS: NEC Laptop
by Roger Hightower <n7kt@earthlink.net>
- 62) [1848] QRPp 97 Back Issues
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 63) [1849] No Narrow Paddle Retrokits Offered by NorCal
by ki6ds@dpol.k12.ca.us (Hendricks, Doug)
- 64) [1850] FS: Argonaut 509 & Alinco Dualbander
by nq2rp@juno.com (B/BAMS Club Station)
- 65) [1851] Re: Elmers wanted...take charge yourself
by Larry Cruise <Larry.Cruise@mci.com>
- 66) [1852] KI6DS's Tuna Tin Two Transceiver
by n2jgu@juno.com (Gary M Diana)
- 67) [1853] Trade Norcal paddle

by "J. Skalski" <jskalski@acsu.buffalo.edu>
68) [1854] Conductive grease
by bcutter@teal.csn.net (Bob Cutter)
69) [1855] Re: KI6DS's Tuna Tin Two Transceiver
by Roger Hightower <n7kt@earthlink.net>

Date: 23 Jan 1998 18:01:46 -0500
From: "rohre" <rohre@arlut.utexas.edu>
To: qrp-l@Lehigh.EDU
Subject: [1787] Heath HW 7 revival and fixes
Message-ID: <n1326543918.22865@msmailgw1.arlut.utexas.edu>

Hope the gentleman getting back in has had an email from Mike our QRP-ARCI guru of the Hot Water rigs. His series in QUARTERLY on HW- series fixes was of great value.

The DC receivers tend to hum on AC power supply, so use a battery, or bypass the bridge rectifier diodes of the AC to DC supply with each having a disc ceramic cap to keep down rectification of local AM radio stations.

Maybe Bill Kelsey of Kanga U.S. still has some stock of HOT WATER HANDBOOKS that detailed the fixes and mods of the Heath HW series?

For not a lot of money, a modern Superhet transceiver from Small Wonders Labs, or one of the other kit sellers would really be a great reentry project to ham radio of the 90's. Of course, most of the kit rigs today are single band. A bit easier to restart out that way, and certainly easier to get going than a HW 7! Wilderness does have its multiband model, but a lot of toroids to wind. Doesn't EmTech have a dual bander as Oak Hills Labs?

72, Stuart K5KVH

Date: Fri, 23 Jan 1998 17:08:47 -0800 (PST)
From: Sam <kc5tja@animeonline.ml.org>
To: Glen Leinweber <leinwebe@mcmail.CIS.McMaster.CA>
Cc: qrp-l@Lehigh.EDU
Subject: [1788] RE: Elmers wanted...take charge yourself
Message-ID: <Pine.LNX.3.96.980123170208.25538D-1000000@animeonline.ml.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I made this list-public, because it sums up my response to everyone perfectly.

> What you propose is already in book form (done at least once).
> A professor had taken the NORCAL 40 rig as a learning tool for a
> basic radio university course, and developed a text (which you can buy).
> It apparently takes the rig apart, circuit by circuit and shows exactly
> how it works. And I imagine that basic radio principles come in along
> the way. This text is available to anyone. I beleive Wayne Burdick
> knows how to get it. A back-search thru QRP-L archives should find
> the relevant posts.

Thanks for the information. Prior to today, I had not known that this type of documentation even existed.

> I tried myself to tackle part of the task you've outlined. The
> results are in winter QRPp. I'm willing to answer questions about the
> contents of that article...everyone seems to be ignoring it. I ask

That's a shame...

> You ask for the literature...and its been available for
> years. And I ask, what does it take to get the irons hot?

Well, it takes will power. I *want* to build my own radio from scratch. I think it's fun and relaxing, even if it doesn't work (but I have a working VFO, so that's a good headstart, yes?).

Besides, paying \$1000+ for a commercial unit is outrageous. Ham radio has become so commercialized it's not funny; to me, amateur radio has always been a personal hobby, so it only makes sense that commercialization is the antithesis of the spirit of ham radio...

> I'm going to try a receiver on QRP-L (in ONE post) tonight.
> Its going to be ridiculously simple. We'll see how many actually
> try to build one.

Well, I already have a VFO...perhaps I can find a way to adapt your circuit to my desired goals... :)

=====

-| TEAM DOLPHIN |-
Chief Architect and Project Founder
(web page under construction)

PGP 5.0 Public Key Available Upon Request.

Date: Fri, 23 Jan 1998 20:05:17 -0500 (EST)
From: "Scott Rosenfeld [NF3I]" <ham@w3eax.umd.edu>
To: rohre <rohre@arlut.utexas.edu>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1789] Re: Power Meter bargain:Ten Tec's kit
Message-ID: <Pine.LNX.3.95.980123200503.17485D-100000@w3eax.umd.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Not to mention, on top of that, that it reads power on 2m as well.

* Scott Rosenfeld NF3I Burtonsville, MD FM19mc QRV 80-10/6/2/440 *
* 6m 82 grids on 8w * DXCC WAS WAC * QRP-L #147 * QRP ARCI #9054 *
* <http://w3eax.umd.edu/~ham> * ARRL Life Member /Laurel ARC/UMARA *
*** 301-549-1022 h 301-982-1015 w *** 35 wpm HF mobile CW Neon ***

On 23 Jan 1998, rohre wrote:

> For those comparing QRP power meters, see my review of the Ten Tec kit Power
> and SWR meter in past QRP-ARCI QUARTERLY, a year or more ago.
>
> The 200 watt meter scale of the Ten Tec also has a 20 Watt scale.
>
> BUT, for QRP, there is enough range in the cal pots to make a 20 Watt scale
> and a TWO WATT (2 W) scale!! Just a twist of the pot!! Checked the 49'er and
> its quarter watt was readable on the standard 20 Watt scale and linear when
> the scale was converted to 2W, but recal of pot.
>
> The rig has both a HF toroidal coupler, and a moni-match stripline type for
> VHF and up. It is useable as a relative indicator out to 440 MHz at least.
>
> The HF of course does 3-50 MHz, thus you have everything from 160M on up for
> \$49 and a modest investment of time. The Ten Tec is smaller profile than the
> WM-2, but it is heavy steel case and rugged. Self contained 9V battery for
> the meter amplifier, or alternate external coaxial power jack for DC power
> supply. Parts and manual are first class, better than Heath kits were.
>
> I don't own stock in TT, etc. (standard disclaimer), but sure own a lot of Ten
> Tec kits! :-) Many still in line for construction! :-)
> 72, Stuart K5KVH
>

Date: Fri, 23 Jan 1998 17:08:57 -0700 (MST)

Date: Fri, 23 Jan 1998 16:39:28 -0800
From: Rick Tavan <tavan@tibco.com>
To: qrp-l@Lehigh.EDU
Subject: [1791] WTS: Norcal Paddle Arms
Message-ID: <3.0.32.19980123163834.02f9430c@tekbspa>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

If you buy a 3rd run Norcal paddle with paddle arms cut for narrow spacing and would prefer the wide spacing, please let me know. I have two sets of wide spacing arms, unfinished, available for swap!

/Rick N7TN

Rick Tavan
TIBCO Software, Inc.
3165 Porter Drive
Palo Alto, CA 94304
+1-650-846-5000
tavan@tibco.com

Date: Fri, 23 Jan 1998 17:04:48 -0800
From: Jim Lowman <jmlowman@ix.netcom.com>
To: kc5tja@animeonline.ml.org
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1792] Re: Elmers wanted...take charge yourself
Message-ID: <34C93E30.B747AE61@ix.netcom.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Sam wrote:

> I made this list-public, because it sums up my response to everyone
> perfectly.
>
> > What you propose is already in book form (done at least once).
> > A professor had taken the NORCAL 40 rig as a learning tool for a
> > basic radio university course, and developed a text (which you can buy).
> > It apparently takes the rig apart, circuit by circuit and shows exactly

> > how it works. And I imagine that basic radio principles come in along
> > the way. This text is available to anyone. I beleive Wayne Burdick
> > knows how to get it. A back-search thru QRP-L archives should find
> > the relevant posts.

I have this textbook, and may just buy a Wilderness Norcal 40a kit to build, while I get a good theory refresher course.

Just a caveat - this is a textbook for an EE course, taught at Caltech, no less.

The math may be a bit daunting to the math-challenged among us, but the theory is very good.

In case anyone has difficulty locating the information, I can pass along the ordering details. As I recall, the book is \$20.

72 de Jim - AD6CW

Date: Fri, 23 Jan 1998 18:14:31 -0600
From: "Phil, K6LS" <k6ls@prolynx.com>
To: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1793] Re: WTS: Norcal Paddle Arms
Message-ID: <34C93267.25D65BD9@prolynx.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Rick Tavan wrote:

> If you buy a 3rd run Norcal paddle with paddle arms cut for narrow spacing
> and would prefer the wide spacing, please let me know. I have two sets of
> wide spacing arms, unfinished, available for swap!

Hmmm, must of missed something....

3rd run of the paddle will have narrow spacing for the levers ???

If that is so.. Would it be possible to offer just the levers for sale in a "after market" option for the original issue kit owners?

--

73 de Phil, K6LS

k6ls@qsl.net <or> k6ls@amsat.org
http://www.qsl.net/k6ls
http://www.prolynx.com/k6ls
DM79oq, Arapahoe County, Colorado
ITU zone 7, CQ zone 4
QRP-L #612 NorCal #824
CQC #471 ARCI #8866

Date: Fri, 23 Jan 1998 19:20:14 -0500
From: "V.C. Angell" <angell@northernnet.com>
To: qrp-l@Lehigh.EDU
Subject: [1794] Pixie Mods
Message-ID: <l03120602b0eee3e90650@[206.24.45.173]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I am compiling a list of modifications to the Pixie. To keep the bandwidth down on this list, if you can, email your favorite modification(s) directly to me at <angell@northernnet.com> I will add a Pixie page to my commercial web site and also pass them on to any archive that wants them. I was chatting the other night on 40, and we came up with somewhere around 20 mods (I guess if all were in one Pixie it would be a Maxie?) -- not counting the 49er as a mod. ;-) Tnx
72,
"VC" KCOEM

V.C. Angell
http://www.jewelry-magick.com
Jewelry with a Secret

Date: Fri, 23 Jan 1998 20:25:04
From: Roger Braker <msebrakr@telepath.com>
To: qrp-l@Lehigh.EDU
Subject: [1795] book for NorCal 40

Message-ID: <3.0.1.16.19980123202504.440f5ff0@telepath.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi All,
Where can I get this "companion" book for the NorCal 40? I would be interested in ording it and a Norcal 40 tranciever. I would like to see a copy of it before a go cold turkey. Is it carried by major book stores? If not. Does anyone in the Oklahom City area have a copy? Thanks.

73,
Arnold kd5ckh

Date: Sat, 24 Jan 1998 01:39:51 +0000
From: Peter Larsen <larsenp@cadvision.com>
To: daniel@pandora.lugs.org.sg
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1796] Re: Reciprocal propagation
Message-ID: <34C94667.6D09E418@cadvision.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi All:
More aluminum in the air means more signal strength both on recieve and transmit. If you look at how many bounces your signal will take and the atenuation of each bounce... The lower the Brewster angle the fewer the bounces. Thus the louder the signal. If you take 3 bounces to get to me and I take 2 to get to you, you can see that I will be louder, but you will be quieter. This (I think but have no proof) is what is happening when there seems to be one way skip.

See you later.
Peter
VE6NA0/CH8MNP

Date: Fri, 23 Jan 1998 20:44:45 -0500 (EST)
From: bruce muscolino <w6toy@pop.erols.com>
To: mikemo@ibm.net
Cc: QRP-L@Lehigh.EDU
Subject: [1797] Re: Elmers wanted...take charge yourself
Message-ID: <2.2.16.19980123213507.296f5baa@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>
>I feel kind of guilty for starting such a long thread. Please allow me
>to say a few short things.
>
Is that like saying "I'm sorry I asked such a dumb question"? The only dumb
question is the unasked one. The only dumb thread is the one unpicked.
>
>1) I did "just do it" and ran into trouble.
>2) I got an incredible amount of help from the fine folks on this list
>3) I probably picked the wrong kit to start with (Dan's NW80/20)
>4) I've been able to get it working with the help of list members (so
>far)
>5) Not one person who responded tried to make me feel stupid or that I
>was "out of my league"
>6) I have an electronics background (digital) so once I got a basic
>explanation of the circuit I could understand it.
>
So, sounds like it worked in the end after all! Don't you just love it when
a plan comes together?
>
>It would have been difficult for someone with no knowlege of electronics
>to get through this far. A better, more detailed kit would be the right
>choice.
>
Seems to me that you did pick the right kit after all. If you'd picked one
with a more detailed manual you wouldn't have learned much, would you.
>
>It sounds like the books may already exist that take you through the
>radio section by section to teach you the theory. Maybe the beginner
>needs a kit, one or two of these books, and a "primer" to point him in
>the right direction throught all these resources.
>
The beginner needs to do just what you did -- get himself in trouble, try to
solve his own problem, and then, AND ONLY THEN (you're digital, you know
what I mean) ask for help. It works best that way.

Date: Fri, 23 Jan 1998 20:45:16 -0500 (EST)
From: bruce muscolino <w6toy@pop.erols.com>
To: QRP-L@Lehigh.EDU
Subject: [1798] Elmering
Message-ID: <2.2.16.19980123213538.2c074ccc@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Here we go again...

I want to do it, I just don't have the time. Guys, surely you've all learned something in your lifetimes. It doesn't matter much, at this point, whether it was needlepoint or fly fishing. When you started you knew nothing and as you learned you made progress. No matter how proficient you actually got it was directly related to how much time you spent actually DOING IT. I can't imagine learning to flycast without using a fly rod and reel and investing a lot of time practicing. (No, I don't know how -- I took up trap shooting instead!)

Well learning electronics is pretty much the same. If you sit around and dream you won't learn a thing. If you only read about it, you'll be well read but have no practical experience. If you read and build you 'll make progress; the amount of progress you make is directly related to your investment of time.

Family, kids, business trips, vacations, bowling league, whatever, I guess I live a sheltered life. I really don't understand how these things affect the time you can devote to learning something you're so obviously eager to learn. Everyone of us has time we can devote to our hobbies every day. It is a matter of prioritizing your time. You travel on business -- this list's founder travels extensively on business -- he takes along a kit and some tools, and instead of inhabiting the hotel bar, or watching ESPN, he builds. Why can't you? Why can't you set aside an hour or two once a week to build and learn? Sure, maybe you'll have to skip a week here and there, but unless you start you'll never feel the guilt of skipping!

Kits, and the learning experience. Kits were never meant to be a learning experience. They were always a means of acquiring something that would ordinarily be financially out of reach without the investment of your time and energy. That the kit manufacturers put some theory in their manuals was nice, but you'd never learn much beyond the "system" level of how it works (the head bone is connected to the whatever). The manufacturer's incentive is, and always was, to make it possible for you to invest your sweat equity successfully, so he can sell you another kit!

Can you learn from kits? Yup. You learn to solder. You learn to do mechanical assembly. You learn something about post production testing. You DON'T LEARN THEORY. Can it help you with scratch building? Oh yes! If you pay attention you can see how the kit designer solved the same problems you'll have to solve -- how to mount controls, how to route wires, whatever. It still won't teach you much theory.

So, how do I learn theory -- by building something that doesn't work and troubleshooting it. Troubleshooting is pretty much an issue of gosintas and comesoutas. If you put the right stuff in and it doesn't come out you go looking for where the problem left OK. That's pretty simplistic, but it's really how it's done.

To learn you need one heck of a lot more than a DVM and a prayer. The first real progress I made in learning electronics came when I first used a scope. And when I got tired of investing my lunch hours in the lab I bought my own. It's one of the three or four most valuable pieces of test equipment I own.

Give up on the idea of designing our own circuits until yo have some experience under your belt. I suggested duplicating a well known design. The intention was to get you over the kit to scratch building hump. By choosing something like an HW7 or HW8 receiver to start with you're starting with a well known quantity. Thousands have been built and most of them worked. Probably anyone who'e dome QRP since the 70s has built AND troubleshot one or both of these radios. They are familiar with the problems and can help you get them going by long distance.

Again, I stand firm -- JUST DO IT! You'll surprise yourself!

73

Date: Fri, 23 Jan 1998 20:48:15 -0500 (EST)
From: bruce muscolino <w6toy@pop.erols.com>
To: QRP-L@Lehigh.EDU
Subject: [1799] Elmering -- Part 2
Message-ID: <2.2.16.19980123213837.2c078476@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Someething I forgot -- learning anything is hard work. Thinking there's a magic method out there where you can turn on your computer and be entertained into becoming a design engineer isn't even science fiction -- it's pure fantasy.

73

Date: Fri, 23 Jan 1998 18:53:23 -0800
From: Brian Kassel <bkassel@dancris.com>
To: w6toy@pop.erols.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1800] Re: Elmering -- Part 2
Message-ID: <34C957A3.70F5@dancris.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

bruce muscolino wrote:

>
> Someething I forgot -- learning anything is hard work. Thinking there's a
> magic method out there where you can turn on your computer and be
> entertained into becomming a design engineer isn't even science fiction --
> it's pure fantasy.

Bruce:

Well said, sir. Perhaps some of us can remove some of the thorns on
the
path, but he student STILL has to wlkak that path.

--
Brian Kassel W5VB0
ARCI # 3623
Phoenix AZ ScQRPions

Date: Sat, 24 Jan 1998 10:05:29 +0800
From: "W. Daniel, 9V1ZV" <daniel@pandora.lugs.org.sg>
To: qrp@pandora.lugs.org.sg
Subject: [1801] Reciprocal propagation
Message-ID: <34c94c6a.pandora@pandora.lugs.org.sg>

Hi,

Thanks for the many replies on this subject. The answers I've received
fall into 3 categories:-

1. Better antenna receives better.
2. Paths are not symmetrical, it could be better in one way.
3. Principle of reciprocity (K5F0) says both will be the same.

What do you think?

73 de 9V1ZV Daniel

--

```
+-----+-----+
| Daniel Wee | daniel@pandora.lugs.org.sg |
| 9V1ZV      |                               |
| QRP-L #667 | 9V1ZV@amsat.org                     |
+-----+-----+
```

Date: Fri, 23 Jan 1998 21:28:08 EST
From: RangerSF5@aol.com
To: njqrp@njqrp.org, qrp-1@Lehigh.EDU, epaqrp-1@leigh.edu
Subject: [1802] fs 2 meter and hf rx
Message-ID: <ae14e186.34c951b9@aol.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

For sale knwd 2 meter 2500 W/ spkr.mic/4 batteries/andST2 Stand up power
supply and charger \$200.00
Drake 2B EX.COND. With Q Multiplier,Loaded with Xtals.
Will consider trade for qrp or???

Bob
WA2HOQ
NJ QRP # 126
QRP-L # 1437
EPA QRP-L # 9

Date: Fri, 23 Jan 1998 21:55:36 -0500 (EST)
From: Robert Parks <rob3ert@vegas.infi.net>
To: qrp-1@Lehigh.EDU
Subject: [1803] FS:
Message-ID: <199801240255.VAA08299@fh102.infi.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Again, I find myself with too many projects and not enough time. Therefore I am offering the following items for sale:

Wilderness SST-20 20 meter xcvr kit --- \$69

NorCal Paddle kit --- \$30

Both items are as received.

The above prices INCLUDE shipping, CONUS.

72/73

Bob Parks
K6AEC (Las Vegas)

Date: Sat, 24 Jan 98 03:07:35
From: "KA5T Larry Wise" <lewise@inetport.com>
To: "qrp" <qrp-1@Lehigh.EDU>
Subject: [1804] N/T FOX HI
Message-ID: <199801240311.VAA06642@admin.inetport.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Anyone know what freq the HI station is likely to come up on???

Larry KA5T

Georgetown, Texas
lewise@inetport.com

Date: Fri, 23 Jan 1998 22:19:29 -0500 (EST)
From: Robert Parks <rob3ert@vegas.infi.net>
To: qrp-1@Lehigh.EDU
Subject: [1805] FS: items
Message-ID: <199801240319.WAA17966@fh102.infi.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

The paddle kit is sold!

The SST-20 is still available.

72/73

Bob Parks
K6AEC (Las Vegas)

Date: Fri, 23 Jan 1998 19:17:08 -0800
From: dave_epps@juno.com
To: qrp-1@Lehigh.EDU
Subject: [1806] sst
Message-ID: <19980123.192329.13190.4.dave_epps@juno.com>

I rcvd my sst kit from Wilderness today and at first glance it looks
"First Class"
dave ab5pc

Date: Fri, 23 Jan 1998 20:26:43 -0800 (PST)
From: Sam <kc5tja@animeonline.ml.org>
To: Jim Lowman <jmlowman@ix.netcom.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1807] Re: Elmers wanted...take charge yourself
Message-ID: <Pine.LNX.3.96.980123202544.26735B-1000000@animeonline.ml.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> Just a caveat - this is a textbook for an EE course, taught at Caltech, no
> less.
> The math may be a bit daunting to the math-challenged among us, but the theory
> is very good.

Please post the ordering information. For \$20, I'd get it in a heartbeat.
Besides, I'm the kind of kid that does math for fun...

=====

-| TEAM DOLPHIN |-
Chief Architect and Project Founder
(web page under construction)

PGP 5.0 Public Key Available Upon Request.

Date: Fri, 23 Jan 1998 21:30:29 -0600
From: launerb@crl.com (William H. Launer)
To: qrp-1@Lehigh.EDU
Cc: ve7ldh@direct.ca
Subject: [1808] Re: Elmer project
Message-ID: <v01530500b0eef1b4fea3@[192.0.2.1]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

laura, Ms Bookworm wrote:

>When it comes to an applied area like electronics, theory is
>useless in isolation. So is practice. Only by combining the two
>(they reinforce each other, often spectacularly) can one really
>learn.

Laura is correct, you need both theory and actual practice to learn.
When I studied EE at the University of Illinois (mostly tube circuits,
transistors were a fledgling device in the early '50s), all basic
electronics courses consisted of both class and lab work. After
we had studied a circuit, we breadboarded it in the lab, and then tuned,
measured, and tweaked it to find how the values of the various components
affected the performance (sometimes, our results were catastrophic!).
This reinforced our understanding of the circuit, as well as teaching the
use of basic instruments for troubleshooting.

Building from the current crop of kits, published "how to" articles, etc.
will enable one to learn construction practices. However, there is one big
problem with using them to learn how things work; that is the lack of
components such as inductances with tuning slugs, and variable caps in
tuned circuits. It's simply too hard to "off-tune" a circuit composed of
toroid
coils and fixed value caps to see the effects! The recent thread about
"how tight do you wind toroids" is a case in point.

For training, I think we need to go back a bit, forget "miniaturation",
and develop on some designs that use some of the older style components.
Yes, you will occasionally let the smoke out, but as long as you use

inexpensive devices like 2N2222s and 2N3904s, it won't set you back much and will be well worth it in learning. Anyway, how can you learn troubleshooting if you don't have a failed component?

72/73, Bill wb0cld

Bill Launer
St. Charles, MO
launerb@crl.com
wb0cld@wb0cld.ampr.org [44.46.66.25]
qrp-l #279 qrp arco #3551
Grid Square EM48RT

Date: Fri, 23 Jan 1998 20:43:08 -0800 (PST)
From: Sam <kc5tja@animeonline.ml.org>
To: "William H. Launer" <launerb@crl.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1809] Re: Elmer project
Message-ID: <Pine.LNX.3.96.980123204142.26735D-1000000@animeonline.ml.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

> For training, I think we need to go back a bit, forget "miniaturation",
> and develop on some designs that use some of the older style components.
> Yes, you will occasionally let the smoke out, but as long as you use
> inexpensive devices like 2N2222s and 2N3904s, it won't set you back much
> and will be well worth it in learning. Anyway, how can you learn
> troubleshooting if you don't have a failed component?

Long live the 2N3904!! I swear, that must be my #1 favorite transistor.
I've never had a need to use JFETs myself, and most likely will never.
The 2N3904 has never, ever failed me...

(Interestingly enough, my working VFO uses a 2N3904 transistor as its
active element. My future VFO buffer and audio amplifiers will also be
based on 2N3904s!)

=====
 -| TEAM DOLPHIN |-
Chief Architect and Project Founder

(web page under construction)

PGP 5.0 Public Key Available Upon Request.

Date: Sat, 24 Jan 1998 04:09:54 +0000
From: SEAB&SHARON LYON <SSLYON@worldnet.att.net>
To: qrp-1@Lehigh.EDU
Subject: [1810] Re: Reciprocal propagation; "more aluminum"
Message-ID: <19980124040952.AAA18362@LOCALNAME>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I MUST HASTEN TO MODIFY THE ASSERTION BELOW SOMEWHAT....
i.e., instead of "more aluminum" (-or, aluminium), I'd say
"more gain on my end" instead. For instance, my \$35
Sterba Curtain has much more gain at lower take-off angle
than what could reasonably be afforded in aluminum and
towers by most of us.

I point this out because it seems that commercial pressure,
-not to mention deception, has stifled awareness of VERY
economical alternatives to "BIG Al"-uminum. I'd advise anyone who
is contemplating purchase of, or discouraged by cost of, BIG Al
to pursue available antenna handbooks and great web sites like
W4RNL's and W6RCA'S, and take the time to evaluate performance/cost
of beams vs wire. Note also that rotation is not all it's cracked
up to be. Just ask anyone who's wind-milled the brake & gears out
of a hi-end rotator with a 40m beam sticking out of it -a couple times.
There are one hell of a lot of hams in ANY direction, given a 30 to 100
degree beam width!
73 =s=

>Reply-To: larsenp@cadvision.com
>Sender: owner-qrp-1@Lehigh.EDU
>From: Peter Larsen <larsenp@cadvision.com>
>To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
>Subject: Re: Reciprocal propagation
>References: <34c82325.pandora@pandora.lugs.org.sg>
>X-To: daniel@pandora.lugs.org.sg
>X-Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
>X-Listprocessor-Version: 8.1 beta -- ListProcessor(tm) by CREN
>Date: Sat, 24 Jan 98 01:39:51 +0000

>
>Hi All:
>More aluminum in the air means more signal strength
>both on receive and transmit. If you look at
>how many bounces your signal will take and the
>attenuation of each bounce... The lower the
>Brewster angle the fewer the bounces. Thus the
>louder the signal. If you take 3 bounces to get to
>me and I take 2 to get to you, you can see that I will
>be louder, but you will be quieter. This (I think but
>have no proof) is what is happening when there seems
>to be one way skip.

>
>See you later.
>Peter
>VE6NAO/CH8MNP

>
>
Seab Lyon, AA1MY, Bethel, CT, USA
FN-31-HJ; ARRL; QCWA; ACRI#9253;
QRP-L#574; NEQRP#511; Pres., C.A.R.A.:
<http://www.danbury.org/org/cara/>

Date: Fri, 23 Jan 98 23:06:28 PST
From: Jade Account <jadepro@jadeprod.com>
To: qrp-l@Lehigh.EDU
Subject: [1811] AA battery failure(long?)
Message-ID: <Chameleon.980123231949.jadepro@jadepro.jadeprod.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Rod and Group:

You earlier wrote:

> Later I brought out the battery tester, which provides a 100ma load
>on 1.5 volt cells. Each cell was tested and the voltage was measured
>with a digital meter. Seven of the cells tested between 1.29 and 1.38
>volts under the same load. The eighth one, and the one which had leaked
>the fluid, measured 1.71 volts UNDER LOAD.
> Now my question is: What mechanism can cause a single cell to read
>1.7+ volts when it has spent it's entire life in an 8 cell string, and
>the others have been uniformly depleted. All the cells were in the
>correct orientation in the holder, and there were no signs of physical

>abuse to them.

I'm no chemist, so I can only speculate. Once the seal was broken on the battery you were introducing oxygen, this in turn changes the chemical mix in the battery action. There are many different voltages out there for various cells (NiCad, Lead-acid, Lithium, Zinc-Air etc.) I suspect changing the chemistry changed the chemical reaction. The other possibility that comes to mind is changing the spacing of the plates, although I suspect that is a dead end.

Funny things can happen. I recall when I was in the military in Germany 30 years ago (DL4ET) I had one of our Microwave Tropospheric Scatter units fail. It just suddenly died. I pulled out the failing module and then replaced it. I took the module to the bench and started trouble shooting. It came down to this one diode in the fault shutdown circuit. There was about 2 volts across the diode...even with the power off! I took it into the shielded room to measure it, thinking perhaps with all the RF around it was rectifying the local fields, I got the same reading. I removed it, and it still measured 2 Volts output. I tried three different meters, same thing. I replaced it with another diode and the unit worked fine. I have since lost the diode, although I know in my junk it will one day turn up. I never figured that one out either. Anyone else ever seen this? Maybe I should get in touch with Agents Mulder and Scully?

72'

Dennis, K1YPP

Jane Blanchard, KA1FUN, President -- Dennis Blanchard, K1YPP, Chief Engineer

	Phone:	603-329-6995 (Telephone hours 4 to 10 PM EST)
Jade	FAX:	603-329-4499
Products,	Orders:	800-523-3776
Inc.	e-mail:	jadepro@jadeprod.com

US Mail: Jade Products, Inc
PO Box 368
East Hampstead, NH 03826-0368

See our Web Page: <http://www.jadeprod.com/>

Date: Fri, 23 Jan 1998 23:22:38 EST
From: N9DD <N9DD@aol.com>
To: qrp-1@Lehigh.EDU
Subject: [1812] Re: Elmering -- Part 2
Message-ID: <26231b2b.34c96c91@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

In a message dated 1/23/98 8:48:09 PM Eastern Standard Time,
w6toy@pop.erols.com writes:

> Something I forgot -- learning anything is hard work.

I have to disagree. I have always been fascinated by the huge difference in the ease of learning, between subjects I enjoy, and those that I HAVE to learn. I can absorb enormous amounts of information in a very short amount of time, if the subject is something that really piques my interest. Subjects that I have to learn and don't really enjoy come very hard to me. I'm sure this is true of most people.

When I first got bitten by the packet radio bug I memorized, understood, and could regurgitate dozens and dozens of commands, connect paths, syntaxes, etc. after only a few days playing with the mode. If I had been studying calculus or some other subject that didn't really interest me, it would have been much different.

Just recently I started creating my own web page to learn some HTML. Again, the information I read on the subject seemed to flow directly to my brain - easy! Am I a real intelligent sort of guy? No way -- I just found the subject interesting and learning it was fun.

I sure wish I could tap into that learning potential with every subject I need to know more about. With radio and electronics I seem to do fine up to a certain level of complexity, then my brain cells shut down. (it usually seems to coincide with the appearance of mathematical formulas :-)).

See y'all on the bands!

Tom N9DD
South Bend, IN

Coming soon to a Fox Hunt near you.

Date: Fri, 23 Jan 1998 23:36:35 -0500
From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>
To: rhiller@sysdev.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1813] Re: CW in a song
Message-ID: <34C96D77.425@quartz.gly.fsu.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Rick Hiller wrote:

> Iron Butterfly,

Inna Gadda Davida?

Date: Fri, 23 Jan 1998 21:44:06 -0700 (MST)
From: Joe Gervais <vole@primenet.com>
To: qrp-1@Lehigh.EDU
Subject: [1814] Neat Multimeter for HB Newbies
Message-ID: <199801240444.VAA17578@usr07.primenet.com>

Howdy Folks,

Since we're all talking about learning HB and circuits and stuff, I figured this might be of interest to those of you needing to acquire some basic test equipment.

Radio Shack has on sale (at least here in ScQRPion territory) an "18-Range Multitester". Looks like an analog multimeter to me, but what do I know? :)

Priced at \$19 down from \$25, and it sure is a neat, compact little unit, with a solid feel. A few ScQRPions recommended it to me last time it went on sale, but I missed out. Managed to pick up the last one in the store this time - Hah! :)

Specs: It's about 3"W x 5"H x 1.5"D and weighs a mere 6 ounces. Perfect palm-size. Measures AC/DC voltages, DC current, resistance and decibels. Fuse protected. Sensitivity is DC 20,000 ohms per

volt, AC 10,000 ohms per volt (or so the box claims).

Oh yeah, and if you put the AA battery in backward it doesn't break it. I... uh... tested that for you. ;-)

Perfect, inexpensive piece of gear for all of us who will soon be attacking that HB Barrier. Looks like with the AZ ScQRPions, QQ and possibly others working on stuff to help "the rest of us", there are going to be plenty of guides to help us non-EE critters through the RF minefields!

So get out there and buy it!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"If it ain't fun, you ain't doin' it right!" -The AZ ScQRPions

Date: Fri, 23 Jan 1998 21:20:06 -0800
From: "D.K. Philbin" <dphilbin@slonet.org>
To: qrp-1@Lehigh.EDU
Subject: [1815] Help with NW 80/20 active filter
Message-ID: <1.5.4.32.19980124052006.006b5718@slonet.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Dear fellow homebrewers,

I received my NW 80/20 Active audio filter from Dan's and no paperwork was included. No schematic..nada. Help!

I received a small circuit board 1 in by 1.5 inches. The op amp is a texas Instruments TL072. A double pole double throw switch along with misc caps and resistors was also included.
If you have the schematic..please e-mail me and i will send an SASE..

Thanks
D.K. Philbin
KD6TK
1480 Ella St

San Luis Obispo, CA 93401

Date: Sat, 24 Jan 1998 05:25:36 GMT
From: adams@chuck.dallas.sgi.com (Chuck Adams)
To: qrp-1@Lehigh.EDU
Subject: [1816] TenTec 1254 WIP (Work in Progress)
Message-ID: <199801240525.FAA14254@chuck.dallas.sgi.com>

Gang,

Just a quick status report for the interested parties at large.

Got email about an error in the manual just now, but I got to that part and it worked. Hmmm.

OK, I'm about 4 hrs into the receiver and I have gotten to page 37 - the start of phase four the audio, AGC and 2nd IF.

Just like the transceiver kits from TenTec the 1254 is built in phases. Build and test each section as you go.

Phase two, where you have the display board and the microprocessor up and running is scary IMHO. I fired it up but tuning didn't move the freq but 5 KHz. Then I found that the faster I tuned the further frequency would move. This bothered me but I continued on hoping that I would find the problem later.

Phase three with the VCOs and PLL circuit completed solved the problem. It works as advertised to this point. In fact I was able to get the 3.5V (email says should be set to 2.5V, so what I plan to do is invoke the Don't Fool With it rule until I talk to TenTec) and the additional voltages at the specified frequencies.

I can say that the main board is very good quality and the parts fit the holes exactly with correct spacing etc. Very nice. Should be able to be done by anyone that has done a OHR, SWL, Wilderness, etc. and succeeded without too much trouble. And I don't think it requires 25 hours, time will tell by Sunday.

I look at the board and would guess about 40% populated. Hard to guess. No toroids to wind in this puppy which will please the

toroid haters. Slug tuned coils for those that like to tweek things. :-) Seems like everything in the recent treads covered.

Ooops. No 2N3904s or 2N2222s but lots of 2N2124s though. :-)

I have notes for those who have purchased a TenTec 1254 GC-receiver.

Film at 11. Pictures on the home page if I get the Epson PhotoPC to ever talk to the computer again. I may cry for help late on Saturday with interrupts and addressing on MSDOS com ports. I do UNIX (tm). :-) And trouble with mom-pop computer shops is that you don't get the manuals. :-) ;-)

dit dit

Chuck Adams K5FO CP-60
<http://reality.sgi.com/adams> adams@sgi.com

Date: Fri, 23 Jan 1998 21:43:51 -0800
From: W7LS <w7ls@blarg.net>
To: qrp-l@Lehigh.EDU
Subject: [1817] Tentec 1320, 20m cw qrp 4-sale, unbuilt
Message-ID: <34C97F97.1B6C@blarg.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi. I have a Tentec 1320 qrp transceiver laying around, here. Never been built. Tentec sells them for \$95 and shipping. I'm offering it for \$75 and 3 for US Priority (HA!) Mail.

The rig has a silkscreened metal cabinet and all parts, still in the bags. The book is here, too. It puts out something like 3 watts and covers 50 or 80 KHz. Something like that. See it on the Tentec web page.

73 de Jim, W7LS

Date: Fri, 23 Jan 1998 22:10:30 -0800
From: Monte Stark <ku7y@sage.dri.edu>
To: SSLYON@worldnet.att.net
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1818] Re: Reciprocal propagation; "more aluminum"
Message-ID: <34C985D6.2F37@sage.dri.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

SEAB&SHARON LYON wrote:

>
> I MUST HASTEN TO MODIFY THE ASSERTION BELOW SOMEWHAT....
> i.e., instead of "more aluminum" (-or, aluminium), I'd say
> "more gain on my end" instead. For instance, my \$35
> Sterba Curtain has much more gain at lower take-off angle
> than what could reasonably be afforded in aluminum and
> towers by most of us.

Maybe!

>
> I point this out because it seems that commercial pressure,
> -not to mention deception, has stifled awareness of VERY
> economical alternatives to "BIG Al"-uminum.

I disagree. There are far more pages written about good wire antennas than there are about high yagis!

> I'd advise anyone who
> is contemplating purchase of, or discouraged by cost of, BIG Al
> to pursue available antenna handbooks and great web sites like
> W4RNL's and W6RCA'S, and take the time to evaluate performance/cost
> of beams vs wire.

Agree!

But don't forget step one: Ask yourself what you want to do with the antenna. What kind of performance do you want.

Then look at what you can budget for the project and then look to see how close to one you can come within the limits of the other!!

> Note also that rotation is not all it's cracked
> up to be.

What is it cracked up to be?

It sure works for me. Just like the book say it will.

> Just ask anyone who's wind-milled the brake & gears out
> of a hi-end rotator with a 40m beam sticking out of it -a couple times.

Yep! I've only had it happen once. But that's a risk that is factored into the decision to have that type of antenna.

> There are one hell of a lot of hams in ANY direction, given a 30 to 100
> degree beam width!

Sure, but how about the other 260 degrees?

I have had phased verticals that worked like gangbusters. Lots of DX worked and some very nice scores in contests. All with 5w.

But there is NO compairison between phased verticals and 2 ele at 85'. It's like going from a indoor wire wrapped around the celling to a phased vertical array!

As far as bang for the buck, (or would that be db for the buck?) I don't think you can beat phased verticals. Or some of the good wire antennas. It all depends on what you want!

I love playing with my little QRP rigs. They are a blast. But I also love using my new 1000MP with all it's super duper knobs and buttons!

It's all apples and oranges. You just gotta decide what you want and go for it. It has taken me since 1953 to get a fancy radio and good antenna/tower. So if you can't get it today, don't give up.....you just can't tell what the future may hold!

I have never met anyone that didn't like having good antennas and rigs! But I have known lots and lots that wanted better antennas and rigs! :-)

There is also no end to what we can hope for.....I plan to stack another yagi on the tower at about 60' next year to see what that does! I paid all of \$25 dollars for a used 3 ele 20m monobander. Why not try it out?

OK, I'm outta here. Just wanted to give another side of that coin!!

cul,

--

73, Ron, KU7Y

NRA Life-----Ex W6JX0, DL4RF, N7CRV-----SOWP #5545-M
QRP ARCI #8829----NorCal #330----QRP-L #17-----ARS #49
AR QRP #150-----DM09cg-----New Washoe City, NV

Date: Sat, 24 Jan 1998 06:48:12 -0800

From: Dave Fifield <fifield@pacbell.net>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [1819] Sierra Questions - Mods?
Message-ID: <34C9FF2C.75F2@pacbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi there,

I expect these questions have been asked and answered many times before, but since I didn't own a Sierra until this week, I didn't bother to save the previous answer/s, so please indulge me, I implore you....

I picked up a pristine example of the Sierra fitted with a KC-1 together with 7 band modules. I have 2 basic questions:

1. What is the going price for this rig (with the extras) on the secondhand market?
(I think I did okay, but I'd just like to make sure!)
2. Is there a compilation of all the mods that one can do to the Sierra (like more power output, XIT...)? I'd really appreciate it if someone could point me in the right direction or send me the file/s.

Please send replies to me personally, don't clog the list.

Thanks in advance,
Dave Fifield, AD6AY

Date: Sat, 24 Jan 1998 01:42:48 -0600 (CST)
From: Adrian Weiss <aweiss@sunflowr.usd.edu>
To: QRP-L@fidoii.CC.lehigh.EDU
Subject: [1820] Reciprocal Propagation
Message-ID: <Pine.SOL.3.94.980124003912.11416J-100000@sunburst>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Daniel raised a question about reciprocal propagation.

The Elmer/homebrewing thread is still going strong -- maybe a little too strong. Let's see if I can find a middle ground between the "go build it" and the "read a book" extremes. In actual fact, both sides are right:

without "study", "hands-on" is limited to "what worked" in solving one specific problem. It may never solve another problem, because it is possible that various unrelated causes can produce very similar symptoms.

In order to understand if "what worked" is actually what solved the problem as opposed to something else, an understanding of theory is needed. Theory consists primarily of the laws of physics -- they apply to all situations regardless of tweaking this or that. Now, any circuit, even a one-tranny crystal oscillator, is not as simple as it looks. Various parts are connected to each of the three tranny leads. They are all locked into an interdependent "dance". Change one part's value, and it changes the operating conditions at all other connections in the circuit. Change another part's value, and it may seem to correct the situation, but in fact, its value could have been correct in the first place, but changing it readjusted the circuit to compensate for what was the incorrect part causing the problem initially. The culprit remains, and assumed to be correct.

Theory is difficult stuff because it says what the conditions are supposed to be at every point in an operating circuit -- in other words, theory reflects the actual complexity of the two dimensional circuit -- d.c. and r.f. These are extrinsically inter-related. For example, the idea of being able to vary the output from a final amplifier from 0.5-5w with a fixed output coupling circuit like a pinet or "Tee" by simply varying the r.f. drive to the final is very attractive. But regardless of the method of lowering power by adjusting just one component, it whacks the dynamic characteristics of everything else in the circuit. To get an idea of what happens to just one dyn. char., check Fig. 8, p.58 in JOY OF QRP. To maintain the match of the collector load impedance to the impedance of the output filter, you have to decrease the Vcc voltage to the collector of the final amplifier to maintain the correct relationships. If you don't, then two things can happen. (1) nothing goes wrong because the circuit is so poorly designed in the first place that a gross mismatch is the normal operating condition and most of the drive power and output power is being absorbed in the circuit itself, with the left-overs actually reaching the output filter -- The same broad-range of adjustable output can be easily obtained using a switchable attenuator. The latter is actually desirable because the circuit keeps pumping out its power with all the dynamic conditions correct. (2) The resulting mismatch sends the final into self-oscillation which, if it doesn't smoke the final, lays a nice broad-spectrum signal all over the place.

Now, how do you know whether, given the Vcc collector voltage and r.f. power available from a correctly matched driver stage, a certain pinet filter will work? You calculate the impedances involved, calculate the value of C1-L1-C2, and build it. Then you do some measurements with an r.f. probe to see what is happening, or look at it on a scope and do some measurements there.

Where do you get the formulae. From a book, or someone here can supply it.

Actually, a trouble-shooting question, if it is to elicit a relevant response, has to have some knowledge behind it. Computer Tech support services at most manufacturers (e.g., Compaq, Gateqay etc) say specifically in the manual that callers should have a print out of their config.sys and autoexec.bat files ready before they call. They represent the operating conditions for the circuit. Otherwise, the tech rep has to ask "does your config.sys have a line in it which says "LH C:\WINDOWS\EMM386.EXE i=eooo-ffff"? "I don't know". Well look. So, opne problem with trouble-shooting on the list is that the question doesn't contain the necesary information because the questioner doesn't know what is important to include in the question. A personal example. A while back, I published an RIT circuit for the HW-8. It used an MPF102 in the control circuit. I got several "thanks" letters. Then a couple of "I checked everything a thousand times and it doesn't work." I finally asked three guys to send me their units. Only then did it become clear to me which question I should have asked: "did you use a genuine Motorola or TI MPF102, or did you pick one of those things stamped "replacement for MPF102 and a zillion other FET's" off the shelf in Radio Shack?" In each case, the builder had done a fine job -- absolutely not mistakes -- except the Radio Shack wide-tolerance, just-about-anything FET. Soldering in a decent MPF102 did the trick in each case.

Why "study" and "hands-on" must happen together should be obvious. Most of us like being Elmers -- we get a rig to work and don't have to do any work ourselves, plus the satisfaction that comes with the smile on another new QRP'r's face! Some of us spend a whole lot of months writing books for newcomers and try as best we can to start at ground zero and explain the essential stuff. A lot of us spend even more time writing stuff for the journals aimed at beginners. Add to that the massive amount of Elmering QRP stuff that is archived by K5FO. And LB W4RNL's bibliographies of articles on subjects of interest to homebrewers. Yes, it takes time to check thru the theory. What's the rush? If you just want something that works right off, most kits will do that. If you want to roll your own, that is a different proposition entirely. Here you need some theory.

There hasn't been a single question that has appeared here, at least that I've seen, that hasn't been thoroughly discussed somewhere at various levels. A lot of the time I want to fire off a "read p. nn of JOY" because I put out the effort to explain the answer. Of course, no one article or book is going to explain everything -- it's all bits and piece, just like a circuit. You don't start from ground zero on Friday, and walk out on Monday knowing everything you need to know.

In very many situations, theory is meaningless unless it is attached to an "experiment", i.e., a "hands-on" project. Now, it goes without saying that

to apply the theory to the project, you need test equipment. But that does not necessarily mean a 150mHz scope -- something I've always dreamed of having. An r.f. probe is an absolute necessity. It is the only means of seeing what is happening in the r.f. dimension of a circuit. Naturally, the VTVM or FETVM or DVM that it is hooked to will also show what is happening in the d.c. dimension. But to make sense of the readings, you have to know what they mean and how to interrelate them. Ugh -- theory.

Dan's question about reciprocal propagation -- propagation is fun-reading. It also is the most mysterious aspect of our hobby. We all experience propagation everytime we turn the rig on. The prop. circuit is probably even more complex than the crystal oscillator -- mainly because it is so big and you can't just measure it wherever you want. But things are happening out there and it is important to know about them. For a beginning, see pp. 111-112 and Figs. 30, 31 in JOY OF QRP about the reciprocal question.

As for the Elmer project being discussed in various forms, I think it would be a great idea -- provided! An integral part of the project ought to be reading assignments. The Elmers can then respond to the questions about parts that don't make sense to them. If the book can't explain it, then an Elmer can. That's what Elmers are for. For example, I'm sure that a reading assignment in DeMaw & Hayward's S-S Design on Class A amplifiers would elicit a bunch of questions. But everyone who read the section would understand {something}! Elmers fill in what beginners can't figure out on their own. Elmers are not there to re-explain the wheel which has been written about umpteen times. So, I sympathise with e-mails from the beginners which state they've read this and that, and can't make sense of it. They are ready to ask a Elmer for help because they are in a position to ask an informed question, i.e., ask about whatever it is they don't understand.

More later..
73 Ade W0RSP

Date: Sat, 24 Jan 1998 00:48:20 -0600
From: "Dick Schneider" <rschneid@ix15.ix.netcom.com>
To: qrp-l@Lehigh.EDU
Subject: [1821] AB0CD/9 superbowl weekend
Message-ID: <199801240751.BAA25408@dfw-ix6.ix.netcom.com>

MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

AB0CD will be venturing from Colorado into 9-land, actually directly into the heart of the dark continent of packerland over the Superbowl weekend. With him will be the Wilderness Sierra, with band modules for 40-30-20. Possible airings: Sunday morning 20-30 meters. Sunday - AFTER the Broncos beat the Packers - 40 meters. Mon morning 20-30 meters.

Go Broncos

72/73 Dick AB0CD..

Date: Sat, 24 Jan 1998 03:32:39 EST
From: RangerSF5 <RangerSF5@aol.com>
To: qrp-l@Lehigh.EDU, epaqrp-l@Lehigh.EDU, njqrp@njqrp.org
Subject: [1822] testing
Message-ID: <e4cde420.34c9a729@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

testing

Date: Sat, 24 Jan 1998 02:16:33 -0800 (PST)
From: Sam <kc5tja@animeonline.ml.org>
To: RangerSF5 <RangerSF5@aol.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1823] Re: testing
Message-ID: <Pine.LNX.3.96.980124021554.30585A-1000000@animeonline.ml.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 24 Jan 1998, RangerSF5 wrote:

> testing

599 at animeonline.ml.org's mail servers, which routes through AxisInternet's mail servers... :)

=====

-| TEAM DOLPHIN |-
Chief Architect and Project Founder
(web page under construction)

PGP 5.0 Public Key Available Upon Request.

Date: Sat, 24 Jan 1998 11:32:14 -0800
From: Tony Fishpool <g4wif@btinternet.com>
To: qrp-1@Lehigh.EDU
Subject: [1824] Those missing pages from Q.Q. (Jan 1998)
Message-ID: <34CA41BE.234F@btinternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

A week or two back, Ron Stark posted a message about the missing pages that contained the LC tester diagram and construction drawings. Shortly after, a colossal (1/2 meg) file appeared on the ARCI website which my old 486 could download, but not display. So I considered that a challenge; to reduce it to manageable proportions ... and failed.

So if I've learned anything from my good friend from California (he knows who he is) it's that there is always the possibility of hussle-ing someone to do the job for you. Just to spread the load a bit you understand :-)

Step forward Steve G0T DJ who is a master of computer graphics. He managed to reduce that 1/2 meg file to two 90k files without appreciable loss of definition, and which I have taken the liberty of placing on the GQRP website at:

<http://ourworld.compuserve.com/homepages/g4wif/arci.htm>

...in case it's of interest to anyone.

This is a superb journal, and anyone not a member and getting their copy regularly, is missing out a lot.

Date: Sat, 24 Jan 1998 07:23:34 +0000
From: Leon Heller <leon@lfheller.demon.co.uk>
To: khamilton@cisnet.com
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [1825] Re: Frequency Counter
Message-ID: <MMun1SA2bZy0EwIo@lfheller.demon.co.uk>
MIME-Version: 1.0

In message <01bd284c\$88a6cbe0\$3f90b3cc@khamilton.cisnet.com>, Keith Hamilton <khamilton@cisnet.com> writes

>I am in the process of building an OHR 100A and the alignment
>calls for use of a frequency counter. I have always thought a
>counter would be nice to have so this may be a perfect excuse,
>errrrr I mean a perfect time to get one!
>
>I'm lost! My instructions say to use a 10:1 probe but how can
>I tell if my counter will have one?
>
>Does anyone know a good (read inexpensive!) counter for an
>infrequent user like myself to purchase?

I use a little pocket-sized Watson FC-128 which covers 1 MHz to 2.8 GHz, 8 digits. They sell in the UK for about #70. I use a 10:1 scope probe with it. They don't come with a probe. At that price it isn't worth building one's own, which I did many years ago.

Leon

--

Leon Heller: leon@lfheller.demon.co.uk <http://www.lfheller.demon.co.uk>
Amateur Radio Callsign G1HSM Tel: +44 (0) 118 947 1424
See <http://www.lfheller.demon.co.uk/dds.htm> for details of my AD9850
DDS system. See " /diy_dsp.htm for a simple DIY DSP ADSP-2104 system.

Date: Sat, 24 Jan 1998 09:26:52 -0500 (EST)
From: Robert Parks <rob3ert@vegas.infi.net>
To: qrp-1@Lehigh.EDU
Subject: [1826] FS: items ---SOLD
Message-ID: <199801241426.JAA17260@fh102.infi.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Gang,

The paddle lit and SST-20 kit, which I listed earlier have been sold. Thank you to everyone who expressed an interest.

72/73

Bob Parks
K6AEC (Las Vegas)

Date: Sat, 24 Jan 1998 09:30:40 -0500
From: W2MY & W2MBY <n2mnn@spacegate.com>
To: QRP-L@Lehigh.EDU
Subject: [1827] FOX: W2MBY N/T Fox 01/24/98
Message-ID: <34C9FB10.5E0E@spacegate.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello,

I got 14 hunters last night which is not too bad. The first hour conditions were about average (lousy), and got 9 contacts. The second hour, however, the QRN was very high, and I had to move up once, so I was lucky to get 5 contacts. Lots of new calls on the list, plus my first /MM.

Did anyone hear Hawaii? The charts say its impossible on 40M from here (NNJ) on 5W. I am trying for HI on 15M. I only need HI and WY for CW WAS (some QSOs are QRO).

FREQ	UTC	CALL	SNT	RVD	NAME	QTH	COMMENT
7141.0	00:03	WD4MSM	559	599	BARRY	TN	
7141.0	00:09	VE5RC	329	229	BRUCE	SK	5W
7141.0	00:13	K0EVZ	229	549	DOC	MN	5W
7141.0	00:17	N1TP	329	529	TOM	FL	1317
7141.0	00:26	WB0T	329	229	JERRY	IA	1268
7141.0	00:31	NI0A	219	569	JOHN	MN	
7141.0	00:35	AB0GO	329	339	DAVE	CO	785
7141.0	00:51	KF6CTA	229	339	DICK	CA	951
7141.0	00:58	AC5JH	219	339	TOM	LA	319
7141.5	01:16	KB0GGQ	219	339	AL	MN	
7141.5	01:27	W1LP/MM	119	529	CLINT	GULF OF MEXICO	2W
7141.5	01:36	N0EUM	219	229	MABEL	IA	
7141.5	01:49	N6MM	219	429	HARVEY	CA	

7141.5 01:59 KA5T 229 339 LARRY TX

72,

John, W2MBY
age:11

Date: Sat, 24 Jan 1998 09:32:27 EST
From: K5BDZ <K5BDZ@aol.com>
To: dphilbin@slonet.org, qrp-l@Lehigh.EDU
Subject: [1828] Re: Help with NW 80/20 active filter
Message-ID: <5442fdf3.34c9fb7d@aol.com>
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7bit

DK

Do you have any QRP books on hand? If so, let me know, give me a few of the parts values, and I can probably tell you what page to look on for the schematic. I'm flying blind, but will play the odds.
Bill, K5BDZ

Date: Sat, 24 Jan 1998 10:37:30 -0500 (EST)
From: bruce muscolino <w6toy@pop.erols.com>
To: N9DD@aol.com
Cc: QRP-L@Lehigh.EDU
Subject: [1829] Re: Elmering -- Part 2
Message-ID: <2.2.16.19980124112903.35d78718@pop.erols.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>

>I have to disagree. I have always been fascinated by the huge difference in
>the ease of learning, between subjects I enjoy, and those that I HAVE to
>learn. I can absorb enormous amounts of information in a very short amount of
>time, if the subject is something that really piques my interest. Subjects
>that I have to learn and don't really enjoy come very hard to me. I'm sure
>this is true of most people.

>

Enthusiasm simply acts as an opiate to the brain, masking the "hard work" with the appearance of fun. Some years ago a sports psychologist did a study that showed as athletes exercise more, and harder, the body produces


```

>
>           0           |           ) Headphone
>           |           |-----0
>           |           |
>           earth       earth
>

```

> Questions to ponder: (Ask if you don't know the answers)

> Why doesn't diode direction matter?

> Why does adding earth improve reception?

> Why doesn't a silicon diode work as well?

> Why do high-Z phones work better?

> Why is this an AM radio, and not SSB or CW?

>

> C'mon, BUILD IT! and start your homebrewing career.

>

> Glen VE3DNL leinwebe@mcmaster.ca

Glen and gang

It does work...its the updated version of the famous "Beachead Radio" that I and hundreds of others used in Anzio in 1944. However we had no diodes and employed 3 low quality double edged razor blades! Two blades stuck parallel into a block of wood and the third(via a kitchen match prop) was mived across the other edges as a "slider". We heard occupied Rome(40 mi), Armed Forces Radio Naples (100mi) and N.Africa sometimes (200 mi). When a shell landed(frequently) you should have heard the QRN! The company phone lines acted as the ant and you couldnt pick up a phone anywhere without hearing music etc.

Stu KB9NAE ex-First Special Service Force WW II

Date: Sat, 24 Jan 1998 08:51:54 -0700 (MST)

From: Joe Gervais <vole@primenet.com>

To: qrp-l@Lehigh.EDU

Subject: [1831] Re: Elmers wanted...take charge yourself

Message-ID: <199801241551.IAA10734@usr08.primenet.com>

Howdy Folks,

This is my last post on the topic, I promise. ;-)

```

> The Elmer/homebrewing thread is still going strong -- maybe a little too
> strong. Let's see if I can find a middle ground between the "go build it"
> and the "read a book" extremes. In actual fact, both sides are right:
> without "study", "hands-on" is limited to "what worked" in solving one
> specific problem.

```

You are, of course, absolutely right - ya gotta read

and ya gotta build! But the thread had drifted quite a bit before your post, so allow me to run this by everyone again.

Here's the problem as originally stated (before it got all muddled up): There are *scads* of books written at the "Meet Mr. Electron" level of difficulty, and there are also legions of books/articles written at the "I already know how to build it" level.

What's missing for many of us non-technical types is the bridge between the two.

Many HB'ers say "just go and do it", but many of us can't leap across that barrier alone. It's *very* tough for us. The material just isn't there at *our* level, in plain English (or French, or Swahili) to bridge the gap.

>From the private email I've received, I can tell you that when these "technically-challenged" newbies read a message from an EE/RF Engineer that says "Just do it!", it's making them feel *very* intimidated. Even though you didn't mean to, it's like calling them lazy and unmotivated to their face, and that's exactly why you're not seeing them post. They're intimidated. Folks, they've tried! And they hit a wall, the same wall I mentioned above. Now a professional EE/RF guru is telling them they just didn't have enough drive. (Hey, was there a HB pun in there? :-)) At least that's what they *perceive* you're saying about them.

These non-technical hams are the *exact* segment of the community that I say are long overdue for some TLC. We're not looking for expert knowledge on the cheap. We just want help across that barrier. We'll take care of ourselves once we get to the other side.

So the REAL problem is simply helping us "RF-design Challenged" critters across that barrier. We aren't asking for a free lunch, we just want help unlocking the doors to the cafeteria so we can get in and join the party with the rest of you!

OK, I'm done. Sorry for dragging this thread on for so long. Fear not, non-tech Newbie Wannabe HB'ers - I'm told there's plenty of help on the way! HB for everyone!

Cheers de AB7TT,

-Joe, vole@primenet.com, AZ ScQRPions (Phoenix)

"It happens sometimes. People just explode. Natural causes." -Repo Man

Date: Sat, 24 Jan 1998 15:54:30 GMT
From: TonyDrumm@ibm.net (Tony Drumm)
To: qrp-1@Lehigh.EDU
Subject: [1832] Photos of paddles and tuner
Message-ID: <199801241554.PAA45628@out4.ibm.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I've set up a small home page and uploaded a few photos of my recent projects, the K8FF paddles (interesting part is the Formby's Granite finish on the base), and Barbie's Rainbow Tuner. Check them out:

<http://www.geocities.com/Yosemite/Trails/2498/aa0sm.html>

72.

Tony Drumm
ARS AA0SM - Rochester, MN

Date: Sat, 24 Jan 1998 11:22:55 -0500
From: John Leveault <jlevro@shore.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [1833] Re: Twist on Elmer Project
Message-ID: <3.0.3.32.19980124112255.00981b10@shell1.shore.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

>
>>Nothing wrong with kits, but I don't think that's the way
>>to learn electronics. That's a good way to learn to follow
>>directions!
>

You should also check out your local community colleges or evening adult education courses. They frequently offer "Electronics I" type courses. As

good as the ARRL Handbook is, there's nothing like the realtime interaction of a teacher and class.

Do not underestimate the importance of a working understanding of Ohm's Law, voltage and current sources, and reactance! I'm a professional engineer and find that a lot of the problems I encounter, even in this era of VLSI, still involves the fundamentals. Those computer simulators are only as smart as the initial guess as to what the circuit should look like. I run into a lot of situations where someone designs up this elaborate contraption but then can't figure out how to bias a transistor. You gotta start at the beginning!

72 de nb1i
John Levreault

Date: Sat, 24 Jan 1998 10:55:50 -0600
From: "Kelly Ellison" <kelman@dialnet.net>
To: <qrp-1@Lehigh.EDU>
Subject: [1834] Wanted:LDG AT-11
Message-ID: <199801241654.KAA08248@shell.dialnet.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi all,

I like my LDG QRP Tuner so much, I would like to find a built LDG AT-11. Please contact me direct with info and price. Thank you and 73.

Kelly Ellison
WB0WQS
QRP-L #702

Date: Sat, 24 Jan 1998 11:43:10 -0600
From: Tom Moll <tomm@xata.com>
To: "'qrp-1@lehigh.edu'" <qrp-1@Lehigh.EDU>

Subject: [1835] Just Do It ! (With Elmer)
Message-ID: <01BD28BD.3FE03470@TOMM>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Consider that there has probably never been anyone in the history of the world that learned to play the piano by reading a book - you have to sit down at the keyboard. A small number of people are able to learn to play by themselves. The vast majority of people do much better and learn faster with a good teacher. The vast majority of those that learn to play, never become extremely proficient or reach a level of professionalism. They do, however, gain enough skill to extract a significant level of enjoyment and personal satisfaction from their endeavor.

This pattern applies to anything of significant complexity and difficulty, including learning electronics, radio theory, building practices, etc. There is no one way to get there that works for everyone. Find your own way, and get the help you need to reach the level of proficiency you desire given the amount of time and level of priority you give it.

Tom Moll, NoBS

Date: Sat, 24 Jan 1998 09:47:12 -0800
From: "D.K. Philbin" <dphilbin@slonet.org>
To: qrp-1@Lehigh.EDU
Subject: [1836] NW 80/20 filter problem solved
Message-ID: <1.5.4.32.19980124174712.006cec08@slonet.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Thanks to all who responded to my plea for help with the NW 80/20 filter.

This list is great!

D.K. Philbin

Date: Sat, 24 Jan 1998 10:00:57 -8

From: "Dan Hogan" <dhhogan@lightside.com>
To: qrp-l@Lehigh.EDU
Subject: [1837] Re: EMTech
Message-ID: <199801241759.JAA09932@mail.lightside.com>

Thanks to all, for Roy Gregsons's address.
Dan Hogan WA6PBY
ARRL-VE*QRP-L*QRP-ARCI*NorCal*CQC*Fists*G-QRP*ARS*

Date: Sat, 24 Jan 1998 10:16:31 -0800
From: "D.K. Philbin" <dphilbin@slonet.org>
To: qrp-l@Lehigh.EDU
Subject: [1838] Toko IF cans..ID
Message-ID: <1.5.4.32.19980124181631.006b49f8@slonet.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Dear Friends of the Ether,

I purchased from Dan's (along with the MW 80/20 active filter..without any paperwork!..you may have seen that post) a bag of assorted IF cans. They all are Toko with strange markings and I am looking for your advice as to how to ID them.

The tops of all the metal cans, surrounding the screwdriver adjustment are the words Toko RCL. (Any idea what RCL means?).

They appear to come in four flavors based on the color of the adjusting slug

Slug color	ID numbers on the side of the cans
------------	------------------------------------

Red	7517 115711 1 Japan
-----	------------------------------

Blue	7517 115711 7 Japan
------	------------------------------

Olive green	7517 115711
-------------	----------------

2
Japan

Yellow 7517
115711
6
Japan

On the bottom there are 4 pins...excluding the two locating tabs that are actually part of the metal "can". Here is the rub...only three of the pins show continuity!

This appears to me to be a coil with a center tap...a center tapped transformer with out a secondary?

Any ideas as to how I can ID these things..I can use the electronics lab at school. I wanted to use these in filter networks and as coils in VFO's..

Thanks..

D.K. Philbin KD6TK

Date: Sat, 24 Jan 1998 12:24:49 -0600
From: Dave Sjolín <sjolin@swbell.net>
To: vole@primenet.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1839] Re: Elmers wanted...take charge yourself
Message-ID: <34CA31F1.65E2@swbell.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Joe Gervais wrote:

> Here's the problem as originally stated (before it
> got all muddled up): There are *scads* of books
> written at the "Meet Mr. Electron" level of difficulty,
> and there are also legions of books/articles written
> at the "I already know how to build it" level.

> What's missing for many of us non-technical types is
> the bridge between the two.

What about all the great books by W1FB? ARRL puts out two of these and I

believe MFJ puts out one of his books on RF design. These are very readable to me, a non technical type. Perhaps you caught the series that was running in CQ magazinen prior to his death.

> >From the private email I've received, I can tell you
> that when these "technically-challenged" newbies read
> a message from an EE/RF Engineer that says "Just do it!",
> it's making them feel *very* intimidated. Even though
> you didn't mean to, it's like calling them lazy and
> unmotivated to their face, and that's exactly why
> you're not seeing them post.

Well if the shoe fits ... Sri. :)

How have they tried? If it is just by reading I doubt that will work. I have tried that route myself for close to 40 years. What I expect will work is actually sitting down and building individual circuits and then experiementing with them. This of course is messy. We may not know what we are doing. And the circuits may not always work but we can learn from that too.

I wonder, how many of us wannabes have ever attempted to build even a simple circuit without benefit of a prelaidd out PC board and kit of parts? Darn few I would bet.

Kit building is great but all it teaches us, if we pay attention, is how to solder, make toroids (drats), identify parts, and trouble shot. And if we are particularly observant, it may teach us something about parts layout. Thats it.

> So the REAL problem is simply helping us "RF-design
> Challenged" critters across that barrier. We aren't
> asking for a free lunch, we just want help unlocking
> the doors to the cafeteria so we can get in and join
> the party with the rest of you!
>

Sorry, Joe what is it that you are asking for? This thread has one on so long I really dont remember.(It happens when you hit 50).

I have learned from reading the mail on this reflector. I probably have learned the most from reading some of the trouble shooting posts. Still I think the only way that you are going to "unlock the doors" is by actually experimenting.

I thought the recent suggestion about the oscillator was great. I am going to build one on a protoboard and see what I can learn.

73 de Dave, N0IT

Date: Sat, 24 Jan 1998 13:40:00 -0500
From: "Tracy, Michael, KC1SX" <mtracy@arrl.org>
To: QRP List <qrp-l@Lehigh.EDU>
Subject: [1840] Elmer project/Norcal 40 book
Message-ID: <m0xwAWw-000ZnTC@mgate.arrl.org>

It seems that there were quite a few messages on this book last year (I missed them all because I didn't get to read the list much last year).
Craig Johnson's post of Sept. 12th refers folks to the Puff distribution page:

<http://www.systems.caltech.edu/EE/Faculty/rutledge/puff.html>

for info on the book, but it isn't there now. However, I did some snooping around on the site and found the book listed on this page instead:

<http://www.systems.caltech.edu/EE/Faculty/rutledge/grouppg.html>

The order form is at:

<http://www.systems.caltech.edu/EE/Faculty/rutledge/puffform.html>

73, Michael Tracy, KC1SX

Date: Sat, 24 Jan 1998 10:54:26 -8
From: "Dan Hogan" <dhhogan@lightside.com>
To: qrp-l@Lehigh.EDU
Subject: [1841] EE20 Book Ordering
Message-ID: <199801241852.KAA11579@mail.lightside.com>

This is the data from my receipt:

Puff Distribution, MS 136-93
California Institute of Technology
Pasadena, CA 91125 USA
626-395-2251 FAX: 626-395-2137

Ask for/Order:
Lecture notes for EE20 Radio Engineering based on the

NorCal 40A.....\$20.00
Dan Hogan WA6PBY
ARRL-VE*QRP-L*QRP-ARCI*NorCal*CQC*Fists*G-QRP*ARS*

Date: Sat, 24 Jan 98 13:30:11 PST
From: Bruce Huyck <bruce@pad-uky.campus.mci.net>
To: List to QRP-L List <qrp-l@Lehigh.EDU>
Subject: [1842] FS SST-30
Message-ID: <MAPI.Id.0016.00727563652e70613543413730303037@MAPI.to.RFC822>
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII; X-MAPIextension=".TXT"
Content-Transfer-Encoding: 7bit

I have too many rigs and need to find my Wilderness SST-30 a new home.
The rig is painted blue to match the paint scheme on the Norcal 40A.
Tuned to put out 2 watts. Manual included. \$72 shipped CONUS.
Bruce Huyck KS4V
243 japonica Drive
Paducah, KY 42003 NORCAL , ARCI, NEQRP
HW-9,Norcal 40A, SWL 40-40,38 spec, OHR 100/20,SST 30

Date: Sat, 24 Jan 1998 14:07:33 EST
From: wa8rxi@juno.com (Richard C Arzadon)
To: qrp-l@Lehigh.EDU
Subject: [1843] QST Index
Message-ID: <19980124.191134.4775.0.WA8RXI@juno.com>

From: WA8RXI
Full-Name: Richard C Arzadon
X-Status: New

From: WA8RXI Full-Name: Richard C Arzadon To: qrp-l@Lehigh.EDU X-Status:
New From: WA8RXI Full-Name: Richard C Arzadon X-Status: New All,
Better-late-than-never category.
Found a Search Directory for QST. It can be found on ARRL BBS. File name
is:
QSTSEARC.ZIP It's an index for 1977 to 1995.
72, Rick WA8RXI QRP-L #1368

Date: Sat, 24 Jan 1998 14:44:32 -0500
From: "Watson R Gabriel Jr" <wgabriel@duke-energy.com>
To: qrp-1@Lehigh.EDU
Subject: [1844] NorCal 49'er PWB Layout?
Message-ID: <05256596.006C39E6.00@dpcmail.dukepower.com>
Mime-Version: 1.0
Content-type: text/plain; charset=US-ASCII

Am wondering if anyone might have or point me to a URL where I can pickup the PWB layout for the old NorCal 49er transceiver. I could even make-do, I think, with a paper printout of the layout instead of a CAD file. Thanks.

Watson/WB4EXW

Date: Sat, 24 Jan 1998 20:22:28 -5
From: "Bill Kelsey - N8ET - Kanga US" <kanga@mail.bright.net>
To: qrp-1@Lehigh.EDU
Subject: [1845] Late Homebrew Sprint Summary
Message-ID: <199801242023.PAA10888@sparticus.bright.net>
MIME-Version: 1.0
Content-type: text/plain; charset=US-ASCII
Content-transfer-encoding: 7BIT

I am finally finishing up the SPRAT reprints and was able to do my log for the Homebrew SSB sprint back on the 11th.

61 qso's, 39 SPC's, total score 16,653.

I was on 160 - 15 meters. Listened and called on 10 but heard nothing. The evening period on the low bands was tough - commercial broadcast on 40, high power lids on 80 (I don't mind the high power, but when there is deliberate QRM). 160 was quite nice - but not a lot of activity.

High point was actually after the test when I read the post to the list by KL7JAF saying I was his only QSO. I was working the southwest on 20 and decided to try to work KL7, so swung the beam NW and called CQ - Bruce was right there - it took a couple of repeats to get all the info, but we did it.

Made it with W3TS on 160, 80, 40, and 20.

I was going to operate my R2/T2 homebrew xcvr on 40, but got to the club where I operate and found I was missing an adaptor, so I used the Drake TR-7 cranked back to 5 W

looking forward to the next one!

73 - Bill - N8ET
Kanga US
kanga@mail.bright.net
<http://www.bright.net/~kanga/>
419-423-4604

Date: Sat, 24 Jan 1998 16:26:58 -0500
From: "Dean Marzocca" <n2tnn@ifu.net>
To: "NJ QRP list" <njqrp@waterw.com>
Cc: "QRP-L" <qrp-l@Lehigh.EDU>
Subject: [1846] beacon 1-24-98
Message-ID: <199801242128.QAA13122@ifu.ifu.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hello all,

I will be running a beacon tonight starting at 2300 UTC for approximately 2 hours.

Rig QRP+ w/ companion tuner and battery
ant dipole NW-SE direction
TICK-2B keyer in the beacon mode
pwr----- YOU TELL ME!!!!!!
Frequency 3.686.4

This is a club project. The NJQRP club met today in Princeton, NJ and is investigating the 80 meter propagation due to the fact that we passed out 20 new Pixie kits. Please report all contacts and provide a signal report. This information will help up to possibly get a net going on a weekly basis.

Post all information to the NJQRP mail list or to me at the address listed below.

72/73 Dean N2TNN NJ

n2tnn@ifu.net

Date: Sat, 24 Jan 1998 14:31:32 +0000
From: Roger Hightower <n7kt@earthlink.net>
To: qrp-1@Lehigh.EDU, azqrp@dancris.com
Subject: [1847] FS: NEC Laptop
Message-ID: <34C9FB43.64E007E4@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

I have an NEC Ultralite Versa-25 laptop for sale. 486/25Mhz, 8Mb ram, 180 Mb HDD, 3.5" floppy, docking station. Monochrome screen. Have all docs, cables for docking station, brand new battery and power supply. Software, too. Win 3.1 is loaded now, with HamCalc and QRPPAL. Also have the side-mounted trackball and an OS/2 mouse.

It's a good machine for ham-related stuff like logging, etc. I have another, and don't need two. Includes carrying case.

If anyone is interested, I'm asking \$350 (you ship) or trade for a Sierra with band modules and KC-2.

Pse reply direct.

--

72/73, de Roger, N7KT

Date: Sat, 24 Jan 1998 14:11:24 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: qrp-1@Lehigh.EDU
Subject: [1848] QRPP 97 Back Issues
Message-ID: <3.0.1.32.19980124141124.00c74cf8@dpol.k12.ca.us>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I have received several emails about the price and availability of QRPP back issues for 1997. Yes they are available. Yes the price is the same, \$15, and yes the shipping is \$3 to US and Canadian addresses, \$5 for DX

Europe & South America, and Pacific Rim, Australia and New Zealand. Please pay in US Funds only, make checks or money orders to Doug Hendricks (Not NorCal) and it helps a bunch if you include a self addressed mailing label. Send to:

Doug Hendricks
862 Frank Ave.
Dos Palos, CA 93620

The total to US & Canada: \$18
DX: \$20

72, Doug, KI6DS

Date: Sat, 24 Jan 1998 14:17:22 -0800
From: ki6ds@dpol.k12.ca.us (Hendricks, Doug)
To: qrp-1@Lehigh.EDU
Subject: [1849] No Narrow Paddle Retrokits Offered by NorCal
Message-ID: <3.0.1.32.19980124141722.00c74cf8@dpol.k12.ca.us>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

NorCal will not be offering a "retro-kit" by selling only the narrow style paddle arms. Why? Well, to do so would require that the machinist would have to completely reprogram his CNC program from the beginning, run the tests, do the setups etc. That costs a lot of money at \$50 per hour, and we are not going to do it. He is not charging us to do the reprogramming for the simple act of switching the side that the notch is cut on from one side to the other, but said that if we wanted to do only paddle arms he would have to charge us for the setup, programming and testing time, which would be several hundred dollars.

When he runs a set of parts, the machine cuts out a set of parts, and it is not feasible to sell just the paddle arms. What are we going to do with the rest of the parts? I hope you understand. Thanks for your interest. 72, Doug, KI6DS

Date: Sat, 24 Jan 1998 17:21:15 EST
From: nq2rp@juno.com (B/BAMS Club Station)
To: qrp-1@Lehigh.EDU

Subject: [1850] FS: Argonaut 509 & Alinco Dualbander
Message-ID: <19980124.171947.9503.0.nq2rp@juno.com>

I am posting this for Lou, KA2DQA who doesn't have Email up & running as of yet.

Lou is looking to part with an Argonaut 509 with an Astatic mike (It looks like a D-104 base, but with a bullet mike head on it. I don't know the model#). Asking price is \$225/pu, \$240 shipped The rig is a 10 electrically and an 8 cosmetically.

Also (not REALLY QRP, but it will run 5 watts...) a 3 month old Alinco DR-605TQ. This is a 2M/70 cm dual-bander, up to 50 watts on 2 Meters and 35 watts on 70 cm. Full CTCSS Encode/Decode, duplex, X-band repeat and all that jazz. Lou is selling it because the radio is not user-friendly for the visually-impaired. The panel labelling is hard to read even with optical aids, and NOT laid out for tactile operation. This rig is still in its warrenty period, and has all the brackets, cables, mike and packing material.

Lou paid \$525 for the rig this fall, and is asking \$450/pu, \$470 shipped

You can contact Lou via telephone at 716-271-3818 or you can contact him via Email to his Email address at nyact@frontiernet.net He is still getting the modem connected, so be patient on the Email.

And, Lou is a member of the B/BAMS group, a QRP'er at heart. Look for him here in the future...

72/73, Keith, WB2VUO at the keys at B/BAMS

NQ2RP - QRP-L # 1294,

Byron/Bergen Amateur Microwaves System Club Station

Listen for our 10 Mtr Milliwatting Beacon: 125 mW @ 28.287 MHz

"Our night light runs more power than our Rig!!!"

Date: Sat, 24 Jan 1998 16:32:42 -0600
From: Larry Cruise <Larry.Cruise@mci.com>
To: "'QRP-L'" <qrp-l@Lehigh.EDU>
Subject: [1851] Re: Elmers wanted...take charge yourself
Message-ID: <01BD28E6.0BD2DEC0@lcruise.ns.mci.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: quoted-printable

The "Elmer/Take Charge/Just Do It" thread has made for interesting = reading. Lots of good ideas contained in these messages. What appears to = be needed is a book that guides your way of discovery into the world of = designing your own ham equipment. The ideal book might be described as = follows:

"The main purpose of this book has been to develop a step-by-step = thinking process so that the relatively new electronics builder can move = from soldering circuits to designing his own equipment. The new builder = may be a ham who has recently upgraded his license and his interests, or = a service technician who wants to create in addition to repairing, or, = perhaps, a hobbyist or computer enthusiast who wishes to build what = others buy. This book is based on the premise that clear thinking is = nine-tenths of the battle to successful design and construction at any = level of skill and electronics knowledge."

Pretty well describes what many people are looking for doesn't it. You = will be surprised to know this book was published back in 1979. The = author L.B. Cebik no less. I guess LBs modesty prevented him from = mentioning it in his post. Ok that is the good news, the bad news is it = is no longer in print. :(

If ever a book cried out to be brought back "Seven Steps to Designing = your own Ham Equipment" this one does. Like "The Joy of QRP" this book = is a true classic.=20

Let me give you a few excerpts from the back cover. "This book is = divided into two parts- preparing yourself to start designing and the = actual steps of the design procedure. . . Chapter 1 explains how to set = up and use a plan that will cause you to "think" design, Chapter 2 = discusses the creation of an "idea book.". . .Chapter 3 and 4 examine = the reasons for asking questions and why you should read, collect = articles and start an idea book. Really sounds great doesn't it, but it = even gets better.=20

"In Part II the Seven Steps to Designing are given and discussed. = Chapter 5 explains Steps 1 & 2, and tells how to specify your design = objectives, sketch your ideas, and make your initial design decisions. = Chapter 6 tells how to choose your circuits and how to modify an = existing circuit or design a new circuit. Then, Chapter 7, along with = Chapters 9 and 11, examines circuit interactions to insure proper = shielding, drive, matching, isolation, etc. Chapter 8 discusses getting = the necessary parts and installing them, and making the circuits work is = covered in Chapter 10." I told you this book is a classic.

In 1979 you could purchase this book for \$9.95! In case you want to see = if you can find one on the used market it was published by Howard W. = Sams & Co., Inc under the following ISBN number 0-672-21631-0.

I don't know what the prospects of getting something like this =
republished, but I have noted MFJ seems to have brought back a number of =
books that were previously out of print. As the book stands it really =
doesn't need to be updated, unless LB wants to put a new picture of =
himself on the back. Really like that jacket your wearing LB. :) =20

The point of this message is many times the answer to a need has already =
been filled. You just need to search it out, and I guess you did in a =
roundabout way. Gee I can't believe I am the only guy on the "L" that =
has this book. :)

-72 Larry (AA5TA)

Date: Sat, 24 Jan 1998 18:01:20 -0500
From: n2jgu@juno.com (Gary M Diana)
To: qrp-l@Lehigh.EDU
Cc: embres@frontiernet.net, wb8ygg@juno.com, n2jgu@juno.com, ki6ds@dpo1.k12.ca.us
Subject: [1852] KI6DS's Tuna Tin Two Transceiver
Message-ID: <19980124.180121.26566.7.n2jgu@juno.com>

Hello All -

Today I produced a bunch of Tuna Tin Two Transmitter boards,
using the CIRCAD artwork file provided by Doug KI6DS.

You can see images of these "fresh out of the etch" beauties at:

<http://www.frontiernet.net/~embres>

In the header of our main page, click on the graphics labeled
"hot image". There are two of these graphics, and each points to a
different image.

Doug has sent this very artwork to Fred @ FAR Circuits, so boards
will be available in the very near future. I couldn't wait, and had
to give in to the hot plate, glass dish, and etchant! Brad WB8YGG
came by to pick up a board, and got the images to our website. Any
guesses as to what Brad is having for dinner tonite??!!

Next: images of the completed project!

73 for now...
- Gary N2JGU
n2jgu@juno.com

Date: Sat, 24 Jan 1998 18:18:16 -0500 (EST)
From: "J. Skalski" <jskalski@acsu.buffalo.edu>
To: qrp-l@Lehigh.EDU
Subject: [1853] Trade Norcal paddle
Message-ID: <Pine.GS0.3.96.980124180513.25834A-100000@xena.acsu.buffalo.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I have a completed norcal paddle. It has highly polished brass parts and glossy black enamel finish that has been polished with 1500 grit wetsanding. You can see yourself in the mirror-like finish. I haven't used it since I built it. I prefer to use my homebrew keyboard.

BTW I have no plans of getting the new narrower spacing paddle.

I would be interested in trading for something interesting. I need a couple of MRF-479's. I need four MAV-11 and couple optical interrupter modules like HB21-B1. I don't know how much these parts are worth. You tell me and we'll figure out the rest :-)

73,

Jim N2GO
The Buffalo QRP CONNECTION
ARCI #9013 QRP-L #381
Life member ARRL
jskalski@acsu.Buffalo.EDU

Date: Sat, 24 Jan 1998 16:14:17 -0700 (MST)
From: bcutter@teal.csn.net (Bob Cutter)
To: qrp-l@Lehigh.EDU
Subject: [1854] Conductive grease
Message-ID: <199801242314.QAA04914@mailman.sni.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Can someone suggest a mail order source for a small quantity of low voltage dc conductive grease? I don't see it in Tech America catalog.

Is this stuff affected by temperature, FYBO?

72, Bob KI0G

Date: Sat, 24 Jan 1998 16:30:16 +0000
From: Roger Hightower <n7kt@earthlink.net>
To: n2jgu@juno.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [1855] Re: KI6DS's Tuna Tin Two Transceiver
Message-ID: <34CA1718.FF0DF29A@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Very nice looking board, there. The XYL just whipped up some tuna sandwiches, and the cats are chasing the tin around...if I can just catch them, I'll have the enclosure on hand when the boards are ready.

--

72/73, de Roger, N7KT

End of QRP-L Digest 980

